CHIEF INFORMATION OFFICE
Los Angeles World Trade Center
350 South Figueroa Street, Suite 188
Los Angeles, CA 90071

Telephone: (213) 253-5600
Facsimile: (213) 633-4733

RICHARD SANCHEZ
CHIEF INFORMATION OFFICER

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To: Supervisor Hilda L. Solis, Chair
        Supervisor Mark Ridley-Thomas
        Supervisor Sheila Kuehl
        Supervisor Don Knabe
        Supervisor Michael D. Antonovich

From: Richard Sanchez
        Chief Information Officer

COUNTY INFORMATION MANAGEMENT STRATEGY

On July 14, 2015, the Los Angeles County Board of Supervisors (Board) unanimously passed a motion directing the Interim Chief Executive Officer (CEO) and the Chief Information Officer (CIO) to provide a Countywide Master Data Management (CWMDM) System implementation report to the Board in 180 days that includes information on the following:

- Project expenditures to date;

- System governance, including day-to-day responsibility and "ownership" of the system, and issue resolution between and among participating departments;

- How the Master Data Management System differs from the existing Department of Children and Family Services (DCFS) Family Child Index (FCI) system;

- Build-out of the Countywide Shared Infrastructure and the Master Person Index (MPI) and Oracle data exchange for the DCFS Child Welfare Services/Case Management System (CWS/CMS);

- A study on the functionality of the proposed consolidated MPI and Electronic Health Records (EHR) system based on the report back to the Board for the April 7, 2015 Motion on EHR system consolidation;

- Dashboard indicators used to monitor development, implementation and usage of the system and the MPI; and

- Future project phases, including build-out and ongoing operational costs, and how interactivity will be achieved with the Department of Public Social Services' (DPSS) Leader Replacement System (LRS) and the CEO's Enterprise Linkages Project (ELP).

CWMDM PROJECT STATUS

To date, the CWMDM project expenditures total $2,299,864 from the over-all budget amount of $5,400,000. The expenditure breakdown is as shown below:

- Software: $1,263,336
- Services: $1,036,528
- Budget balance: $3,100,136

Project overall status is on schedule and on budget.

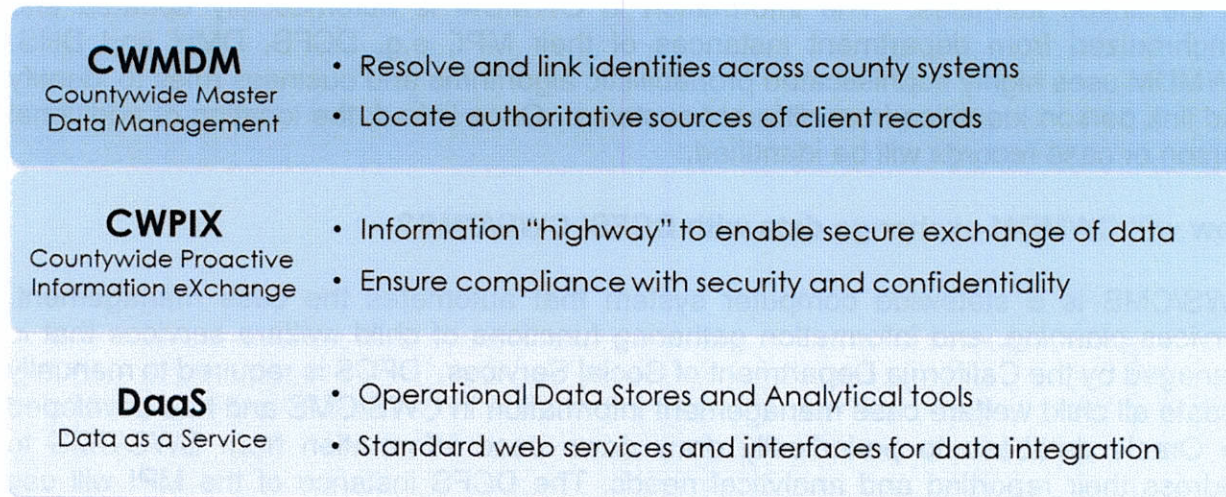|	
●	DCFS implementation (2.5 million current and historical children records) – planned go-live on 4/4/16 • Requirements validation - completed • Baseline configuration – in progress • User acceptance testing – March 2016
●	Department of Mental Health (DMH) implementation (800,000 current records) – planned go live on 5/26/16 • Requirements validation – completed • Baseline configuration – in progress • User acceptance testing – April 2016
●	Countywide MDM (approximately 8 million records: DCFS, DMH and DHS) – July 2016 • Requirements and architecture – in progress • Baseline configuration – May 2016 • User acceptance testing – June 2016

CWMDM GOVERNANCE

Following the Board's approval to proceed with the implementation of the first phase of CWMDM in June 2015, the Chief Data Officer (CDO) established a CWMDM Governance Council comprised of current and future participating departments, including DCFS, Health Agency Departments, DPSS and Internal Services Department (ISD).

The Governance Council will oversee the implementation of the departmental instances of a MPI (dMPI) for DCFS, DMH, Countywide MDM, and its integration with the Department of Health Services' (DHS) MPI. Participating departments will be responsible for managing the implementation and day-to-day operations of their dMPIs and the CDO will manage the Countywide MDM and its integration with dMPIs. On completion of the first phase of CWMDM, the CDO will begin to work with other departments, including DPSS and Public Safety Departments to interoperate with CWMDM.

ARCHITECTURE AND SHARED INFRASTRUCTURE FOR DATA SHARING

The architecture for data sharing is comprised of three components:

CWMDM Countywide Master Data Management	• Resolve and link identities across county systems • Locate authoritative sources of client records
CWPIX Countywide Proactive Information eXchange	• Information "highway" to enable secure exchange of data • Ensure compliance with security and confidentiality
DaaS Data as a Service	• Operational Data Stores and Analytical tools • Standard web services and interfaces for data integration

The first phase of CWMDM will establish a Countywide MDM instance and dMPI instances for DCFS and DMH, and integration with DHS' MPI. Once completed, CWMDM will be used as the "identity clearing house" to link common client identities across these departments and identify potential client records for sharing.

The CDO will also be evaluating the use of the Proactive Information eXchange (PIX) platform that is currently being used to exchange information between Public Safety departments for a Countywide application. The purpose of Countywide PIX is to provide the "information highway" by which information can be shared and exchanged using the common client linkages established by CWMDM.

Data-as-a-Service is comprised of data repositories serviced by a common set of analytical tools, standard web services and interfaces to publish, access and analyze aggregated data to infer trends and provide analytics for policy, business decision making and to facilitate service integration.

How does CWMDM differ from DCFS' FCI?

FCI is a customized database used by participating departments (DCFS, District Attorney, Public Health, Mental Health, Probation, Public Social Services and Sheriff) as a "pointer" system that refers authorized users to agencies for specific case information related to children that have been identified as being at-risk for child abuse and neglect. FCI stores basic demographic data about families and children that have had contact with public agencies and have been designated as "at-risk" for abuse or neglect. Participating departments identify these cases and manually update FCI with basic information.

Authorized users perform manual searches in FCI to identify additional case information that may be available from other participating agencies.

CWMDM is used to resolve and link identities across systems and locates records based on the linked identities. The information in CWMDM is automatically updated and synchronized from department instances of their MPI, e.g. DCFS, DMH and DHS. CWMDM uses highly sophisticated probabilistic algorithms and business rules to identify and link person identities from different systems. Once linked, the location of additional person or case records will be identified.

How will CWMDM exchange data with DCFS' CWS/CMS?

CWS/CMS is a statewide computer system that automates the case management, services planning, and information gathering functions of child welfare services that is managed by the California Department of Social Services. DFCS is required to manually update all child welfare case management information in CWS/CMS and has developed an Oracle database to periodically draw down case information from CWS/CMS to address their reporting and analytical needs. The DCFS instance of the MPI will use person demographics from the Oracle database to reconcile identities across DCFS cases to create a "golden" person record, which is subsequently passed along to CWMDM to identify potential linkages to "golden" person records from other County systems.

How does CWMDM fit into the County's consolidated EHR strategy?

DHS has implemented a MPI, using the same technology platform as CWMDM, to create "golden" patient records across its health system. CWMDM will utilize these to find links to records from DCFS and DMH to create a "common" client record, which can in turn be used to identify patient records that can be shared across DCFS, DMH and DHS. The County has started an evaluation of the Probation Electronic Medical Records System, Integrated Behavioral Health Information System and the Sheriff's Jail Hospital Information System to create a strategy that will generate a consolidated EHR. The CDO will work with the evaluation team in the coming months to determine the role of CWMDM in creating and sharing the County's consolidated EHRs.

How does CWMDM interact with the DPSS LRS and the CEO's ELP?

DPSS is a member of the CWMDM Governance Council and will be evaluating how to integrate DPSS' master client records from LRS into CWMDM. The CEO has recently completed its transition of ELP from a vendor-hosted environment to a centrally-hosted ISD platform. ELP utilizes custom built algorithms to reconcile identities in its database. The CDO will work with CEO and DPSS to determine how ELP can leverage the identity resolution capabilities of CWMDM.

What is the build-out and ongoing costs for CWMDM?

In July 2015, the Board approved an Agreement with IBM to acquire an enterprise license for CWMDM, which entitles County to utilize the software to manage up to 10 million person identities. The five-year operating costs for CWMDM are as follows:

	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20
Software license & maintenance	$ 1,263,336	$ 221,883	$232,977	$244,626	$256,858
Phase 1 implementation services	$ 3,124,413	$ -	$ -	$ -	$ -
IBM technical support	$ -	$ 275,000	$ 275,000	$ 275,000	$ 275,000
ISD hosting	$977,366	$756,748	$794,586	$834,315	$876,031
Total	**$ 5,365,115**	**$1,253,632**	**$1,302,563**	**$1,353,941**	**$1,407,888**
Cost recovery ($ per person record)		$.13	$.13	$.14	$.14

The implementation and first year of CWMDM operations are funded in equal parts by the CEO IT Fund, Productivity Investment Fund and the Information Technology Fund. Beginning in FY 16-17, the operation of CWMDM will be offset by recovering the cost from participating departments at the rate of $.13 - $.14 per person record.

If you have any questions or require further information on this matter, please let me know or your staff may contact Peter Loo, Chief Deputy Director, at 213.253.5627 or PLoo@cio.lacounty.gov.

RS:PL:lc

c: Chief Executive Office
      Executive Office, Board of Supervisors
      Internal Services Department